General

Guideline Title

Pain management in older adults. In: Evidence-based geriatric nursing protocols for best practice.

Bibliographic Source(s)

Horgas AL, Yoon SL, Grall M. Pain management. In: Boltz M, Capezuti E, Fulmer T, Zwicker D, editor(s). Evidence-based geriatric nursing protocols for best practice. 4th ed. New York (NY): Springer Publishing Company; 2012. p. 246-67.

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Horgas AL, Yoon SL. Pain management. In: Capezuti E, Zwicker D, Mezey M, Fulmer T, editor(s). Evidence-based geriatric nursing protocols for best practice. 3rd ed. New York (NY): Springer Publishing Company; 2008. p. 199-222.

Regulatory Alert

FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- March 22, 2016 – Opioid pain medicines : The U.S. Food and Drug Administration (FDA) is warning about several safety issues with the entire class of opioid pain medicines. These safety risks are potentially harmful interactions with numerous other medications, problems with the adrenal glands, and decreased sex hormone levels. They are requiring changes to the labels of all opioid drugs to warn about these risks.

Recommendations

Major Recommendations

Levels of evidence (I–VI) are defined at the end of the "Major Recommendations" field.

Assessment Parameters

Assumptions (AGS Panel on Persistent Pain in Older Persons, 2002 [Level VI]; American Geriatrics Society Panel on Pharmacological

Management of Persistent Pain in Older Persons, 2009 [Level I]; Herr et al., "Pain assessment," 2006 [Level I]; Pasero & McCaffery, 2011 [Level VI])

- Most hospitalized older patients suffer from both acute and persistent pain.
- Older adults with cognitive impairment experience pain but are often unable to verbalize it.
- Both patients and health care providers have personal beliefs, prior experiences, insufficient knowledge, and mistaken beliefs about pain and pain management that (a) influence the pain management process, and (b) must be acknowledged before optimal pain relief can be achieved.
- Pain assessment must be regular, systematic, and documented in order to accurately evaluate treatment effectiveness.
- Self-report is the gold standard for pain assessment.
- Effective pain management requires an individualized approach.

Strategies for Pain Assessment

Initial, Quick Pain Assessment (Herr et al., "Acute pain management," 2006 [Level V])

- Assess older adults who present with acute pain of moderate-to-severe intensity or who appear to be in distress.
- Assess pain localization, intensity, duration, quality, and onset.
- Assess vital signs. If changes in vital signs are absent, do not assume that pain is absent (Herr et al., "Pain assessment," 2006 [Level I]).

Comprehensive Pain Assessment (American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons, 2009 [Level I]; Herr et al., "Pain assessment," 2006 [Level I]; Pasero & McCaffery, 2011 [Level VI])

- Review medical history, physical exam, and laboratory and diagnostic tests in order to understand sequence of events contributing to pain.
- Assess cognitive status (e.g., dementia, delirium), mental state (e.g., anxiety, agitation, depression), and functional status. If there is evidence of cognitive impairment, do not assume that the patient cannot provide a self-report of pain. Be prepared to augment self-report with observational measures and proxy report using the hierarchical approach.
- Assess present pain, including intensity, character, frequency, pattern, location, duration, and precipitating and relieving factors.
- Assess pain history, including prior injuries, illnesses, and surgeries; pain experiences; and pain interference with daily activities.
- Review medications, including current and previously used prescription drugs, over-the-counter drugs, and complementary therapies (including home remedies). Determine which pain control methods have previously been effective for the patient. Assess patient's attitudes and beliefs about pain and the use of analgesics, adjuvant drugs, and nonpharmacological treatments. Assess history of medication or alcohol abuse.
- Assess self-reported pain using a standardized measurement tool. Choose from published measurement tools and recall that older adults may have difficulty using 10-point numerical rating scales. Vertical verbal descriptor scales or faces scales may be more useful with older adults.
- Assess pain regularly and frequently, but at least every 4 hours. Monitor pain intensity after giving medications to evaluate effectiveness.
- Observe for nonverbal and behavioral signs of pain, such as facial grimacing, withdrawal, guarding, rubbing, limping, shifting of position, aggression, agitation, depression, vocalizations, and crying. Also watch for changes in behavior from the patient's usual patterns.
- Gather information from family members about the patient's pain experiences. Ask about the patient's verbal and nonverbal/behavioral expressions of pain, particularly in older adults with dementia.
- When pain is suspected but assessment instruments or observation is ambiguous, institute a clinical trial of pain treatment (i.e., in persons with dementia). If symptoms persist, assume pain is unrelieved and treat accordingly.

Nursing Care Strategies (American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons, 2009 [Level I]; Hadjistavropoulos et al., 2007 [Level I]; Herr et al., "Acute pain management," 2006 [Level I]; Herr et al., "Pain assessment," 2006 [Level I]; Wells, Pasero, & McCaffery, 2008)

General Approach

- Pain management requires an individualized approach.
- Older adults with pain require comprehensive, individualized plans that incorporate personal goals, specify treatments, and address strategies to minimize the pain and its consequences on functioning, sleep, mood, and behavior.

Pain Prevention

- Develop a written pain treatment plan upon admission to the hospital, or prior to surgery or treatments. Help the patient to set realistic pain treatment goals, and document the goals and plan.

- Assess pain regularly and frequently to facilitate appropriate treatment.
- Anticipate and aggressively treat for pain before, during, and after painful diagnostic and/or therapeutic treatments. Administer analgesics 30 minutes prior to activities.
- Educate patients, families, and other clinicians to use analgesic medications prophylactically prior to and after painful procedures.
- Educate patients and families about pain medications and their side effects; adverse effects; and issues of addiction, dependence, and tolerance.
- Educate patients to take medications for pain on a regular basis and to avoid allowing pain to escalate.
- Educate patients, families, and other clinicians to use nonpharmacological strategies to manage pain, such as relaxation, massage, and the use of heat and cold.

Treatment Guidelines

Pharmacological (American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons, 2009 [Level I]; Pasero & McCaffery, 2011 [Level VI])

- Administer pain drugs on a regular basis to maintain therapeutic levels. Use as needed (PRN) medications for breakthrough pain.
- Document treatment plan to maintain consistency across shifts and with other care providers.
- Use equianalgesic dosing to obtain optimal pain relief and to minimize side effects.
- For postoperative pain, choose the least invasive route. Intravenous analgesics are the first choice after major surgery. Avoid intramuscular injections. Transition from parenteral medications to oral analgesics when the patient has oral intake.
- Choose the correct type of analgesic. Use opioids for treating moderate-to-severe pain and nonopioids for mild-to-moderate pain. Select the analgesic based on thorough medical history, comorbidities, other medications, and history of drug reactions.
- Among nonopioid medications, acetaminophen is the preferred drug for treating mild-to-moderate pain. Guidelines recommend not exceeding 4 g/day (maximum 3 g/day in frail elders). The maximum dose should be reduced to 50% to 75% in adults with reduced hepatic function or history of alcohol abuse.
- The other major class of nonopioid medications, nonsteroidal anti-inflammatory drugs (NSAIDs), should be used with caution in older adults. Monitor for gastrointestinal (GI) bleeding and consider giving with a proton pump inhibitor to reduce gastric irritation. Also monitor for bleeding, nephrotoxicity, and delirium.
- Older adults are at increased risk for adverse drug reactions due to age- and disease-related changes in pharmacokinetics and pharmacodynamics. Monitor medication effects closely to avoid overmedication or undermedication and to detect adverse effects. Assess hepatic and renal functioning.

Nonpharmacological (Pasero & McCaffery, 2011 [Level VI]; Wells, Pasero, & McCaffery, 2008 [Level I])

- Investigate older patients' attitudes and beliefs about, preference for, and experience with nonpharmacological pain treatment strategies.
- Tailor nonpharmacological techniques to the individual.
- Cognitive behavioral strategies focus on changing the person's perception of pain (e.g., relaxation therapy, education, distraction) and may not be appropriate for cognitively impaired persons.
- Physical pain relief strategies focus on promoting comfort and altering physiologic responses to pain (e.g., heat, cold, transcutaneous electrical nerve stimulation [TENS] units) and are generally safe and effective.

Follow-up Assessment

- Monitor treatment effects within one hour of administration and at least every 4 hours.
- Evaluate patient for pain relief and side effects of treatment.
- Document patient's response to treatment effects.
- Document treatment regimen in patient care plan to facilitate consistent implementation.

Definitions:

Levels of Evidence

Level I: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

Level II: Single experimental study (randomized controlled trials [RCTs])

Level III: Quasi-experimental studies

Level IV: Non-experimental studies

Level V: Care report/program evaluation/narrative literature reviews

Level VI: Opinions of respected authorities/consensus panels

AGREE Next Steps Consortium (2009). Appraisal of guidelines for research & evaluation II. Retrieved from http://www.agreetrust.org/?o=1397 .

Adapted from: Melnyck, B. M. & Fineout-Overholt, E. (2005). Evidence-based practice in nursing & health care: A guide to best practice. Philadelphia, PA: Lippincott Williams & Wilkins and Stetler, C.B., Morsi, D., Rucki, S., Broughton, S., Corrigan, B., Fitzgerald, J., et al. (1998). Utilization-focused integrative reviews in a nursing service. Applied Nursing Research, 11(4) 195-206.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Pain, including:

- Acute pain
- Persistent pain
- Nociceptive pain
- Neuropathic pain

Guideline Category

Evaluation

Management

Prevention

Treatment

Clinical Specialty

Family Practice

Geriatrics

Nursing

Pharmacology

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Health Care Providers

Hospitals

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To provide a standard of practice protocol for pain management of older adults such that they will either be pain free or their pain will be controlled to a level that is acceptable to the patient and allows the person to maintain the highest level of functioning possible

Target Population

Hospitalized older adults

Interventions and Practices Considered

Assessment/Evaluation

1. Review of medical history, physical exam, laboratory and diagnostic tests
2. Assessment of cognitive and functional status
3. Pain assessment at regular intervals
4. Review of medications
5. Patient self-report of pain using standardized measurement tools
6. Assessment of nonverbal and behavioral signs of pain
7. Patient and family reports of pain characteristics

Management/Treatment

1. Use of individualized approach
2. Prevention
    - Facilitation of appropriate treatment
    - Education about use of analgesic medications and nonpharmacologic strategies to manage pain
3. Treatment
    - Pharmacologic
    - Nonpharmacologic
4. Follow-up assessment
    - Response to and effects of treatment
    - Documentation of regimen and response

Major Outcomes Considered

- Self report of pain relief
- Functional status
- Iatrogenic complications

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Although the Appraisal of Guidelines for Research and Evaluation (AGREE) instrument (described in Chapter 1 of the original guideline document, *Evidence-based Geriatric Nursing Protocols for Best Practice,* 4th ed.) was created to critically appraise clinical practice guidelines, the process and criteria can also be applied to the development and evaluation of clinical practice protocols. Thus, the AGREE instrument has been expanded (i.e., AGREE II) for that purpose to standardize the creation and revision of the geriatric nursing practice guidelines.

The Search for Evidence Process

Locating the best evidence in the published research is dependent on framing a focused, searchable clinical question. The PICO format—an acronym for population, intervention (or occurrence or risk factor), comparison (or control), and outcome—can frame an effective literature search. The editors enlisted the assistance of the New York University Health Sciences librarian to ensure a standardized and efficient approach to collecting evidence on clinical topics. A literature search was conducted to find the best available evidence for each clinical question addressed. The results were rated for level of evidence and sent to the respective chapter author(s) to provide possible substantiation for the nursing practice protocol being developed.

In addition to rating each literature citation as to its level of evidence, each citation was given a general classification, coded as "Risks," "Assessment," "Prevention," "Management," "Evaluation/Follow-up," or "Comprehensive." The citations were organized in a searchable database for later retrieval and output to chapter authors. All authors had to review the evidence and decide on its quality and relevance for inclusion in their chapter or protocol. They had the option, of course, to reject or not use the evidence provided as a result of the search or to dispute the applied level of evidence.

Developing a Search Strategy

Development of a search strategy to capture best evidence begins with database selection and translation of search terms into the controlled vocabulary of the database, if possible. In descending order of importance, the three major databases for finding the best primary evidence for most clinical nursing questions are the Cochrane Database of Systematic Reviews, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Medline or PubMed. In addition, the PsycINFO database was used to ensure capture of relevant evidence in the psychology and behavioral sciences literature for many of the topics. Synthesis sources such as UpToDate® and British Medical Journal (BMJ) Clinical Evidence and abstract journals such as *Evidence Based Nursing* supplemented the initial searches. Searching of other specialty databases may have to be warranted depending on the clinical question.

It bears noting that the database architecture can be exploited to limit the search to articles tagged with the publication type "meta-analysis" in Medline or "systematic review" in CINAHL. Filtering by standard age groups such as "65 and over" is another standard categorical limit for narrowing for relevance. A literature search retrieves the initial citations that begin to provide evidence. Appraisal of the initial literature retrieved may lead the searcher to other cited articles, triggering new ideas for expanding or narrowing the literature search with related descriptors or terms in the article abstract.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Levels of Evidence

Level I: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

Level II: Single experimental study (randomized controlled trials [RCTs])

Level III: Quasi-experimental studies

Level IV: Non-experimental studies

Level V: Care report/program evaluation/narrative literature reviews

Level VI: Opinions of respected authorities/consensus panels

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Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Not stated

Evidence Supporting the Recommendations

References Supporting the Recommendations

AGS Panel on Persistent Pain in Older Persons. The management of persistent pain in older persons. J Am Geriatr Soc. 2002 Jun;50(6 Suppl):S205-24. [126 references] PubMed

American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. Pharmacological management of persistent pain in older persons. J Am Geriatr Soc. 2009 Aug;57(8):1331-46. PubMed

Hadjistavropoulos T, Herr K, Turk DC, Fine PG, Dworkin RH, Helme R, Jackson K, Parmelee PA, Rudy TE, Lynn Beattie B, Chibnall JT, Craig KD, Ferrell B, Ferrell B, Fillingim RB, Gagliese L, Gallagher R, Gibson SJ, Harrison EL, Katz B, Keefe FJ, Lieber SJ, Lussier D, Schmader KE, Tait RC, Weiner DK, Williams J. An interdisciplinary expert consensus statement on assessment of pain in older persons. Clin J Pain. 2007 Jan;23(1 Suppl):S1-43. PubMed

Herr K, Bjoro K, Steffensmeier J, Rakel B. Acute pain management in older adults. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translastion and Dissemination Core; 2006 Jul. 113 p. [469 references]

Herr K, Coyne PJ, Key T, Manworren R, McCaffery M, Merkel S, Pelosi-Kelly J, Wild L, American Society for Pain Management Nursing. Pain assessment in the nonverbal patient: position statement with clinical practice recommendations. Pain Manag Nurs. 2006 Jun;7(2):44-52. PubMed

Pasero C, McCaffery M. Pain assessment and pharmacologic management. St. Louis (MO): Mosby Elsevier; 2011.

Wells N, Pasero C, McCaffery M. Improving the quality of care through pain assessment and management. In: Hughes RG, editor(s). Patient safety and quality: An evidence-based handbook for nurses. Vol. 1. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2008.

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for selected recommendations (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Patient

- Freedom from pain or pain will be at a level that the patient judges as acceptable
- Maintenance of highest level of self-care, functional ability, and activity level possible
- No iatrogenic complications, such as falls, gastrointestinal upset/bleed, or altered cognitive status

Nurse

- Ongoing and comprehensive pain assessment
- Documentation of prompt and effective pain management interventions

- Documentation of systematic evaluation of treatment effectiveness
- Knowledge of pain management in older patients, including assessment strategies, pain medications, nonpharmacological interventions, and patient and family education

Institution

- Maintenance of strong institutional commitment and leadership to improve pain management:
  - Provision of adequate resources (including compensation for staff education and time; necessary materials)
  - Clear communication of how better pain management is congruent with organizational goals
  - Establishment of policies and standard operating procedures for the organization
  - Clear accountability for outcomes
- Establishment of an internal pain team of committed and knowledgeable staff who can lead quality improvement efforts to improve pain management practices
- Documentation of pain assessment, intervention, and evaluation of treatment effectiveness, including adding pain assessment and reassessment questions to flow sheets and electronic forms
- Use of a multispecialty approach to pain management, including referral to specialists for specific therapies (e.g., psychiatry, psychology, physical therapy, interdisciplinary pain treatment specialists)
- Development of clinical pathways and decision-support tools to improve referrals and multi-specialty consultation
- Provision of pain management resources for staff (e.g., educational opportunities; print materials; access to Web-based guidelines and information)

Potential Harms

- Older adults are at increased risk for adverse drug reactions.
- Nonsteroidal anti-inflammatory drugs (NSAID), should be used with caution in older adults. Monitor for gastrointestinal bleeding and consider giving with a proton pump inhibitor to reduce gastric irritation. Also monitor for bleeding, nephrotoxicity, and delirium.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Chart Documentation/Checklists/Forms

Mobile Device Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Horgas AL, Yoon SL, Grall M. Pain management. In: Boltz M, Capezuti E, Fulmer T, Zwicker D, editor(s). Evidence-based geriatric nursing protocols for best practice. 4th ed. New York (NY): Springer Publishing Company; 2012. p. 246-67.

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2003 (revised 2012)

Guideline Developer(s)

Hartford Institute for Geriatric Nursing - Academic Institution

Guideline Developer Comment

The guidelines were developed by a group of nursing experts from across the country as part of the Nurses Improving Care for Health System Elders (NICHE) project, under sponsorship of the Hartford Institute for Geriatric Nursing, New York University College of Nursing.

Source(s) of Funding

Hartford Institute for Geriatric Nursing

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Horgas AL, Yoon SL. Pain management. In: Capezuti E, Zwicker D, Mezey M, Fulmer T, editor(s). Evidence-based geriatric nursing protocols for best practice. 3rd ed. New York (NY): Springer Publishing Company; 2008. p. 199-222.

Guideline Availability

Electronic copies: Available from the Hartford Institute for Geriatric Nursing Web site .

Copies of the book *Evidence-Based Geriatric Nursing Protocols for Best Practice*, 4th edition: Available from Springer Publishing Company, 536 Broadway, New York, NY 10012; Phone: (212) 431-4370; Fax: (212) 941-7842; Web: www.springerpub.com .

Availability of Companion Documents

The following are available:

- *Try This*® - issue 7: Pain assessment for older adults. New York (NY): Hartford Institute for Geriatric Nursing; 2 p. 2012. Electronic copies: Available in Portable Document Format (PDF) from the Hartford Institute of Geriatric Nursing Web site .
- *Try This*® - issue D2: Assessing pain in older adults with dementia. New York (NY): Hartford Institute for Geriatric Nursing; 2 p. 2012. Electronic copies: Available in PDF from the Hartford Institute for Geriatric Nursing Web site .
- Pain assessment in older adults. How to Try This video. Available from the Hartford Institute of Geriatric Nursing Web site .

The ConsultGeriRN app for mobile devices is available from the Hartford Institute for Geriatric Nursing Web site .

Patient Resources

None available

NGC Status

This summary was completed by ECRI on February 2, 2004. The information was verified by the guideline developer on March 12, 2004. This summary was updated by ECRI on October 4, 2004 following the withdrawal of the drug Vioxx (Rofecoxib) and again on January 12, 2005 following the release of a public health advisory from the U.S. Food and Drug Administration regarding the use of some non-steroidal anti-inflammatory drug products. This summary was updated on April 15, 2005 following the withdrawal of Bextra (valdecoxib) from the market and the release of heightened warnings for Celebrex (celecoxib) and other nonselective nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI on June 16, 2005, following the U.S. Food and Drug Administration advisory on COX-2 selective and non-selective non-steroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI on June 23, 2008. The updated information was verified by the guideline developer on August 4, 2008. This NGC summary was updated by ECRI on June 25, 2013. The updated information was verified by the guideline developer on August 6, 2013. This summary was updated by ECRI Institute on October 28, 2013 following the U.S. Food and Drug Administration advisory on Acetaminophen. This summary was updated by ECRI Institute on September 18, 2015 following the U.S. Food and Drug Administration advisory on non-aspirin nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI Institute on June 2, 2016 following the U.S. Food and Drug Administration advisory on Opioid pain medicines.

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